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VOLUME XVII.

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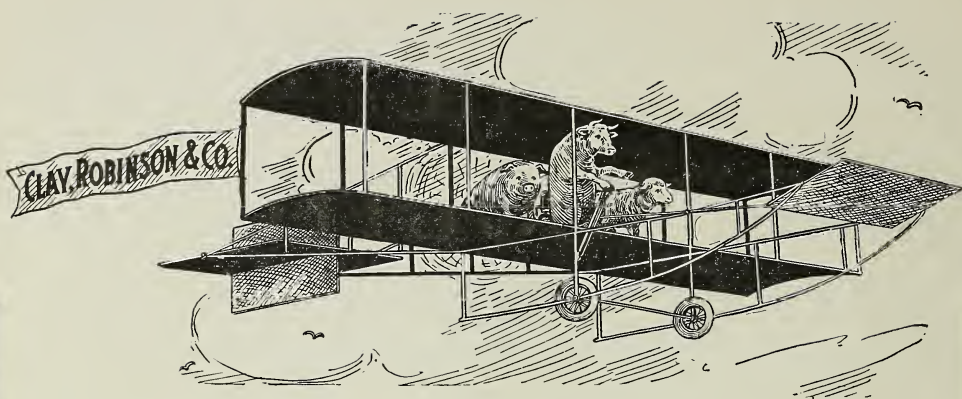
THE AGRICULTURAL STUDENT



MAY, 1911

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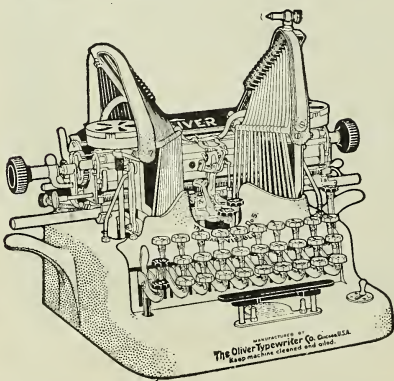
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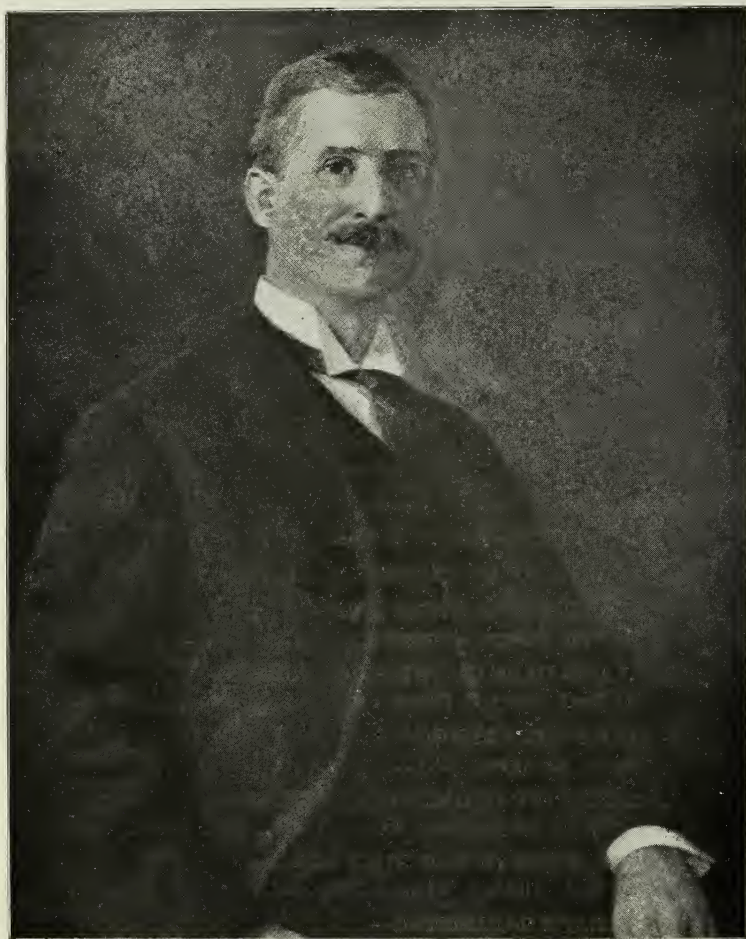
H. C. Price, Dean, College of Agriculture, Ohio State University



MAY PASTURE.

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THE AGRICULTURAL STUDENT

Vol. XVII.

OHIO STATE UNIVERSITY, COLUMBUS, MAY, 1911

Number 9

The Portrait of Professor Plumb

Herewith is presented a photographic reproduction of a portrait of Professor C. S. Plumb, recently presented by the students and alumni of Ohio Agricultural College to the Saddle and Sirloin Club of Chicago.

The Saddle and Sirloin Club is an organization of prominent live stock commission men, journalists and packers at the Union Stock Yards and the more famous breeders and feeders of several states. The club occupies spacious and elegant quarters on the top floor of the Pedigree Record Building at the yards, and here may be seen the large collection of paintings of prominent live stock men which have made the club famous all over the country.

The collection includes paintings of men who have taken rank in various lines of live stock work, in fact, it is a "gallery of honor" for stockmen. The truth of this is realized when it is learned that all of these paintings have been provided, not by the club, but by the friends and admirers of the men whose portraits are to be found there.

Among the portraits are those of men who have made a name for themselves as instructors in Animal Husbandry. There is a painting of Professor Craig, the father of Animal Husbandry instruction, presented by the students and alumni of the Texas and Wisconsin Colleges. The men of Iowa have hung a

portrait of Dean Curtis and there is a fine likeness of Dean Henry, the gift of the alumni of Wisconsin. Paintings of Dean Liggett of Minnesota and of Professor Carlyle of Colorado are also included.

The painting of Professor Plumb is presented to the Saddle and Sirloin in recognition of his untiring work and unselfish devotion to public service. His aim has been to build up a department of Animal Husbandry at Ohio State University that will rank second to none in this country. At all times he has given his best efforts to the cause of live stock betterment. As Secretary and Treasurer of the Ohio Live Stock Association since its inception, he has been the main force in keeping it alive and useful. He is also President of the Ohio Berkshire Association and President of the Ohio Poultry Association. He has been instrumental in perfecting a new organization known as the Ohio Association for the Promotion of Pure-bred Sheep, which has already proved its usefulness in the cause expressed by the name. He has written many articles for the agricultural press, has delivered lectures in several states upon various phases of live stock husbandry, and as author of "Little Sketches of Famous Beef Cattle," "Types and Breeds of Farm Animals" and "A Partial Index to Animal

(Concluded on Page 27.)

The Rate of Planting Corn

Bp Prof. George Livingston

There is a difference of opinion among many farmers regarding the proper rate of planting corn in order to produce a maximum crop. Some of this difference in opinion is probably due to the difference in existing conditions under which the observations were made. Sometimes, too, the opinions have been formed from general observations, and have not been established by an actual comparison of yields with different rates of planting under similar conditions. The opinions based upon different conditions affecting the proper rate of planting are usually well founded, but often definite opinions of the proper rate of planting are based upon the size of the ear produced rather than the number of bushels per acre.

Probably in most cases the effect of the various rates of planting upon the yield have been over emphasized by many growers. Of course, the proper number of stalks per hill and hills per acre in order to obtain a maximum yield, in so far as that factor influences yield, will vary with different conditions of soil, cultivation, etc. The proper rate of planting on a poor field is not the proper rate in a fertile field; the proper rate of planting in a poorly prepared seed bed is not the best rate at which to plant in a well prepared seed bed; the proper rate of planting in an unfavorable season, if we could forecast the weather conditions, would not be the proper rate for a favorable season, etc.

Since the proper rate of planting to produce a maximum yield depends upon many factors, the Experiment Stations have not been able to make a definite recommendation regarding the number of stalks per hill or the number of hills

per acre. Several stations have conducted experiments along this line, and from the results obtained have made general recommendations that will assist the grower in determining the proper rate of planting.

At the Nebraska Station, with hills 44 inches each way, the yield was about the same from 3, 4 or 5 grains per hill. When the corn was planted thinly, at this station, many suckers or tillers were produced, many of which produced ears. If planted thickly, the per cent. of barren stalks was greater.

At the Illinois Station, with different distances between hills and with a varying number of grains per hill, the greatest yield was obtained with 12,000 plants per acre, which can be had by planting three kernels per hill, with hills $39\frac{1}{2} \times 39\frac{1}{2}$ inches or 36×44 inches. Along with this experiment at the station other tests were carried on after the same plan, on various soil types in different parts of the state. The results indicate that in the fertile soils of Northern Illinois higher yields are obtained with hills 36 inches each way and three grains per hill, while in some of the less fertile soils the best yield was obtained with two grains per hill.

At the Ohio Station, with the rate of planting varying from one to five grains per hill, and hills 42 inches each way, there was only a few bushels' variation in the yield of 3, 4 and 5 grains per hill. Four grains per hill produced the largest yield. Two grains per hill produced about 81 per cent., and three grains about 95 per cent. as much as four grains per hill.

In the results of the Ohio and Nebraska experiments there is a noticeable difference in the size of ear and the per

cent. of barren stalks in the thick and thin planting. In the thinly planted corn the ears are relatively larger in size, the percentage of two-eared plants is greater and the percentage of barren stalks is less than in the thicker plantings.

These results seem to indicate that the rate of planting does not affect the total yield as much as is generally believed by many growers. This is due, in a great measure, to the ability of the corn plant to adapt itself to existing conditions. If planted too thinly, the plant in order to produce as much as is possible under existing conditions, produces large ears, more plants bearing two ears, and fewer barren stalks. If planted too thickly, the ears are smaller, the percentage of two-eared plants is lower and the percentage of barren stalks is greater.

The Ohio Station is of the opinion that the farmers of the state are planting too thinly rather than too thickly to produce a maximum yield. Many prefer a high percentage of large ears rather than a large number of smaller ears and a few bushels more per acre. The Ohio Station suggests for good soil conditions a rate of three grains per hill and hills 32×42 inches.

The Ohio Station, in comparing drilling with hilling of corn, found that one grain every 12 inches or two grains every 24 inches produced better results than three grains 36 inches apart or four grains 48 inches apart. While three or four bushels more per acre can usually be secured by drilling, it is often a question if the increase in yield will compensate for the extra labor necessary in keeping the field free from weeds.



“Give men their gold, and knaves their power,

Let fortune's bubbles rise and fall,
Who plows a field, or trains a flower,
Or plants a tree is more than all;

For he who blesses, most is blessed.

And God and man will own his worth
Who seeks to leave as his bequest
An added beauty to the earth.”

Feed and Care of the Work Horse

By Prof. Harry P. Evans

Under favorable conditions the regularity in work, feeding, and rest brings comfort and long years of usefulness to the work horse. With the limited bill of fare usually adopted, the feeding of work horses would seem an easy

240 quarts for the ox, hence the horse doesn't need a large amount of bulky feed as does the ox. From 10 to 18 pounds of concentrates should be fed daily, according to the severity of the labor, the total grain and hay averag-



“WE APPRECIATE YOUR CARE.”

matter. Such, however, is not the case. Two men with similar conditions as to horses and feed may get entirely different results.

Horses performing hard work on the farm need rich food, for the richer the food the more easily it is digested and the greater the proportion available for work. The capacity of a horse's stomach is only 19 quarts, as compared with

ing not less than two pounds per 100 pounds of horse.

It is very necessary to regulate the amount of feed according to the amount of work being performed. One feeding experiment showed that where hard-worked horses, getting 19 quarts of oats, with 14 pounds of hay, and straw without limit, were stopped from work for three days and fed the same ration,

paralysis, often resulting in death, would occur. By reducing the concentrates during idle days to one-third the original amount, with the same amount of roughage, the trouble ceased.

Where several horses are kept on the farm they should be fed and cared for, as far as possible, by one man. It is easy to estimate quite closely the amount of feed required by a given number of horses, but there should always be modifications for different horses; one horse will require a little

be avoided. A quick change from corn to oats may bring on colic, but changing from oats to corn is not so dangerous. An abrupt change from old to new hay or from late to early cut hay may bring trouble.

The horseman should remember that along with liberal feeding there should be vigorous exercise or severe labor and that these conditions must be well balanced. As soon as hard work is over the horse should be given a reasonable amount of exercise. If the horse must



A CLYDESDALE FOUR-IN-HAND.

more than the regulation allowance, another a little less, the object being to keep each in the desired condition. No other farm animal is so much the creature of habit as is the horse and in no way is he so much so as in the matter of feed and its administration. Sudden changes in quantity and variety should

be kept in idleness it will be necessary to reduce the allowance of food if the proper balance is maintained. The idle horse should receive less than half the amount of grain given when on regular duty. In some instances no grain need be given if the roughage supplied is of good quality.

¶ ¶ ¶

Go, make thy garden fair as thou canst,
 Thou workest never alone;
 Perchance he whose path is next to
 thine
 Will see it, and mend his own.

—Robert Collyer.

Wood Preservation

By A. M. Agler, '12

The aim of wood preservation is to put the wood in condition to best withstand the attacks of bacteria and fungi which are the main causes of wood decay. The treatment of timber prolongs its life, and allows the use of inferior woods for structural purposes in place of the better species which are rapidly becoming harder and more expensive to obtain.

The simplest way to prolong the life of timber is to reduce the moisture content. This may be done by proper seasoning, accomplished by a correct method of piling, and also by kiln drying. There is sometimes used an exterior coating of cement or some such material that will harden on the wood. This, however, is not an effective protection.

The most effective way to preserve timber is by injecting poisonous substances into the wood and poisoning the food supply of the bacteria and fungi, thus preventing their activities. This process is known as "chemical impregnation." There have been many such poisons suggested, but there are only a few practical ones. Of these few, the

only ones in common use are creosote and zinc cholride. These substances are injected under high pressure into the wood until it has become thoroughly impregnated.

This treatment of timber brings about a direct saving to the individual timber user, and also means a great saving to the whole nation. At the present rate of consumption, our best classes of timber are sure to be exhausted in the very near future. Of the total amount of nearly ten billion board feet of timber used for structural work, 80 per cent. is destroyed each year by decay. Much of this waste may be saved by proper methods of preservation.

In the case of ties, poles, posts, piles, and all other woods exposed to decay, the annual replacement amounts to an enormous amount of timber and takes a large sum of money to cover the cost. The following table will show the reduction in annual cut, and the saving in dollars each year, which would result from a proper preservative treatment of all kinds of structural material that can be treated with profit:

CLASS.	Estimated Average Life in Years.		Estimated Annual Replacement		Tot. Annual Savings, Equivalent Bd. Meas., Million Ft.	Total Annual Saving.
	Untreat'd	Treated	Untreated	Treated		
			Number	Number		
Ties	7	17	100,000,000	41,200,000	1,940,000	\$16,100,000
Poles	13	23½	2,462,000	1,380,000	64,920	2,880,000
Posts	8	22	500,000,000	180,000,000	1,900,000	24,000,000
Piles	3½	21½	1,140,000	190,000	159,600	1,800,000
Mine Props..	3	13	*67,000,000	*15,300,000	310,200	12,000,000
Lumber	8	20	†2,625,000	†1,050,000	1,575,195	15,000,000
Totals....					5,950,195	\$71,780,000

* Cu. ft. † Million ft. Bd. M. (Bul. 78, U. S. Forest Service.)

These statistics are taken from Bulletin 78, Forest Service, U. S. Department of Agriculture.

Co-operative Community Breeding

By C. M. Richardson, '10

Competition is said to be the "life of trade," but excessive competition often works great hardships. Monopoly is the opposite extreme. It is the concentration of much power into few hands. When left unrestrained it often develops serious evils. Between competition and monopoly stands co-operation. The principle on which this rests is "mutual help for self-help." Co-operation is

have become more widespread than in the United States. But within the last 30 years, in this country, a large number of co-operative undertakings among farmers have developed. Many of these have failed, others have become very successful. Notable among these are the California and Colorado co-operative fruit shipping industries, and the co-operative shipping of vegetables in



COMMUNITY ASSETS.

practiced more or less in many industries. The division of labor is a kind of co-operation. The employees of a large factory work in co-operation with each other, to turn out a single finished product. City, State and National Governments usually work in co-operation with each other. All these are comparatively highly specialized forms of co-operation.

Like agricultural science, co-operation among farmers is a comparatively new development of agricultural economy. In European countries it seems to

the South. Grain elevator, creamery, and fire insurance co-operation among farmers have also been carried on successfully to a large extent.

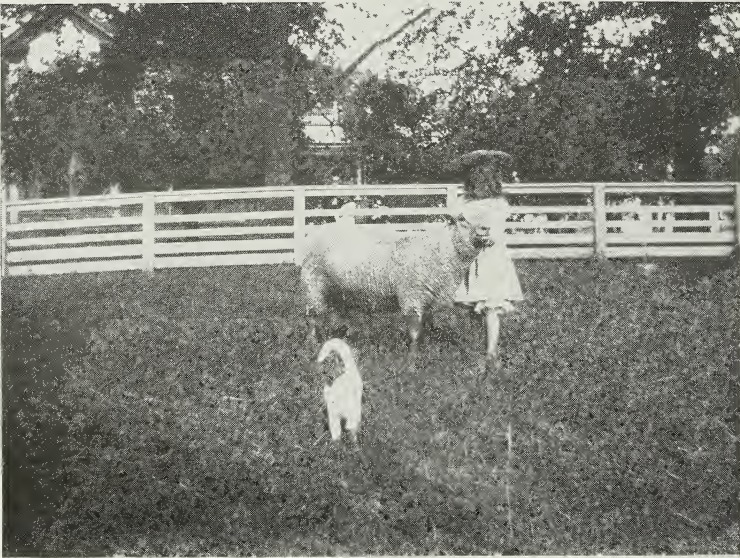
Another line of co-operation among farmers is co-operative or community breeding. This, though it is quite new in this country, gives promise of great things in the future.

The increasing value of farm lands make it necessary that we have also an increased production per acre. To increase the productive efficiency of the land we must maintain live stock there-

on. If we are to keep larger numbers of live stock successfully, we must raise that kind which produces the maximum returns from a given amount of feed. In order to secure this kind of stock we must procure good foundation stock and propagate it by breeding. But the average farmer does not have sufficient capital and initiative to make a success of breeding high class, pure-bred stock. Hence, in order that the breeding of

edge enough of business methods to work together as other business men do. They must have intelligence enough to keep down foolish greed, petty dishonesty and small jealousies. These things are like sand in a watch, they stop the machinery."

In order for a community to become intelligent its members must cultivate friendliness among themselves. They must form granges or clubs so as to min-



CHUMS.

pure-bred stock may be successfully accomplished, the plan of community breeding presents itself as the solution of the problem.

But in order that co-operation of any kind may be successfully carried on among farmers they must have the right feeling towards each other. H. H. Lyon says: "An intelligent and educated community is the only one where co-operation succeeds, and **there** it is necessary to have one or more good men who have an adaptation for leadership." Hoard's Dairyman, in discussing this, says: "They must have knowl-

gle with each other. They must cultivate the spirit of agreement. They must become well-versed through the influence of a liberal supply of good literature. They must learn to co-operate in various things of community interest. They must develop a community pride. With their intelligence cultivated to this degree, the community will be in a position to successfully promulgate co-operative breeding.

Community breeding has been successfully accomplished. All the great breeds of animals of today have had their origin in certain communities or

localities. Some of these communities have gained their initial reputation through the work of some great breeder or leader. For example, about the name of Robert Bakewell clings the reputation of the Leicester sheep. Other communities have co-operated to a larger extent in the improvement of their particular breed of animals. Notable ex-

strictly co-operative effort to any great extent, still they illustrate the fact that when any community engages in the breeding of one distinct breed of animals to the exclusion of others, they can establish a world-wide reputation.

In Wisconsin are examples of purely co-operative breeding associations. Sixteen of these organizations have been



A GOOD START.

amples of this are the communities where the Jersey, Guernsey and Holstein-Friesian cattle originated. In this country a few localities have become noted either as the place of origin of a new breed, as noted in the case of the Poland China in Southwestern Ohio; or as a center of some certain breed, as Syracuse, New York, and the Holstein-Friesians.

While some of these localities may not have established their reputation by

formed for the improvement of dairy cattle, and one of the oldest of these is at Lake Mills, Wisconsin. The farmers here are co-operating in the breeding of Holstein-Friesian cattle, for which they have established a wide reputation. The receipts from the animals they sell amounts to \$200,000 annually.

To make community breeding a success all the good farmers of the community should organize into a breeder's association. They should then select

the breed of live stock which they are to breed. They should elect an energetic, live business man as secretary, whose duties shall be to know what stock each breeder has, to aid in making exchanges, and to advertise all the stock for sale through the association. He should have registry books for tracing the pedigrees of animals to be bought. All animals which are for sale should be referred to him so he can direct buyers directly to them.

When dairy cattle are being bred, this association can co-operate in testing cows for milk and fat production, as well as for tuberculosis. There are also many other ways of co-operation, such as employing a competent veterinarian, buying supplies, and selling products. With all the men of a community breeding one kind of stock, a common interest will develop, and hence sociability will be increased. The desire to learn more will lead to meetings, where the various problems may be thoroughly discussed, perhaps, at times, by the aid of outside lecturers of note.

Community breeding presents the especial advantages accruing from the fact that the breeders, by a systematic changing about through their neighborhood, are enabled to keep a good sire a long time.

The use of one sire by several breeders will enable them to buy the best sires available because there will not be as

much risk to each individual breeder. A place is provided where a large buyer may come and buy all the stock he wants with little trouble. It will bring the buyers who are willing to pay the price. It will cheapen the shipping rates because entire car lots can be shipped at once. It will give the community a world wide reputation as a breeding center for a certain class of stock. It will tend to increase the interest in pure-bred stock throughout the country and hence cause a great increase in the quality and productiveness of the nation's live stock, together with a great improvement of our agricultural conditions.

Great results are possible in the improvement of a breed by community breeding because the best foundation stock can be secured and the co-operation in selection and the individual competition in breeding the best, will do much to improve the breed.

Finally, community breeding is a straight, honest, legitimate business. It results in building up the community in wealth, intelligence, prosperity and comfort. It interests the boys in the farm. It provides wider and much greater benefits than where promiscuous breeding is the rule in a community. It furnishes a means whereby the agriculture of our country can take a vast step forward in agricultural economy.



THE CHRISTENING.

Agriculture in the Holy Land

By S. J. Alcalay, '11

Generally speaking, we have in the Holy Land two seasons, viz: the wet and the dry, in contradistinction to the summer, autumn, winter and spring of this or the European countries. The wet season begins with November and lasts until April. The balance of the year goes to the credit of the dry season, when rain is not seen at all. This is

to 12 inches in width and ending anteriorly in a point. This is from two to ten inches in length, depending upon the condition of the soil and the amount of gravel present. But the average one simulates in miniature the plow we see in the riding harrows of this country. A mold-board and a plowshare are not sharply defined in this primitive imple-



only an approximate division of the year, as sometimes it rains sooner or lasts longer than the times mentioned.

To suit himself to climatological conditions the farmer must make haste and have his ground plowed immediately after the first rain. The soil is in condition to be tackled by the plow even after the first rain, which usually is abundant. By January the land is already covered.

The plow in this method of farming consists of a flat iron measuring from 8

ment to which a camel, a jack and an ox, or a team of oxen are hitched. The Arab follows and guides the plow, singing or praying Allah to allow him to enjoy good destiny, for the Mohammedans are fatalists. The ground is immaculately well prepared, for it is plowed and replowed in three or four directions. And one would wonder at the good crops obtained from such a land where neither weeding, harrowing, manuring nor thinning is practiced. Good harvests are obtained in rainy years only.

Harvesting is done with the sickle, in which operation men and women participate.

The feet of cattle thresh the grain. This is accomplished in the following manner: A piece of unplowed and level land is chosen in which the sheaves of wheat or barley are laid within a circumference of thirty-two feet in diameter. Eight shod oxen are yoked together and guided by a man armed with a prod. I remember when I had to do this tedious job myself before we introduced the occidental farming machinery.

The second method, in which modern machinery is largely used, is practiced mostly by the German and Jewish farmers. Although we don't see hay loaders, corn shredders, and silage cutters, the United States motors of different sizes are quite well known machines and are used to run the wheat threshers, irrigation pumps for orchards, and the like.

The plow is the same as that used by the American farmer. Gang plows are not largely used, though we see great plows, drawn by six or eight teams of mules, when breaking a new land, preparing the ground for an orchard or otherwise used for amending the qualities of the soil when the subsoil is of different texture. The sowing is done by drill, while in the preceding method it is done by hand.

Artificial fertilizers and barnyard manure are used, weeding and thinning are extensively practiced. Thus we see that occidental methods are in use absolutely.

There is an Agricultural College, called Mikweh-Israel, in the outskirts of Joppa. Here the farmer boys spend three or four years in order to master the science of agriculture. The writer had the privilege of graduating from

this College. The teachers are graduates of Montpellier (France) College of Agriculture. In this institution a portion of land is yearly devoted to experimental purposes. A green house is also seen, where exotic plants are sheltered. Besides, many seeds and plants are yearly imported from Paris. The aim of the institution is to teach the up-to-date methods of raising all farm products. We see about the college buildings orchards of the different fruit trees and lands devoted to various cereals, vineyards, and the like.

The Jew and the German farmers understand and practice rotation of crops.

The following is a list of the crops mostly raised: Wheat, barley, oats, sorghum, broom corn, maize, sesame, vetch, lentil, peas, beans, lupine, watermelons, cantaloupes, cucumbers, pumpkins, tomatoes, eggplants, cabbage, Irish potatoes, sweet potatoes and beets, all non-irrigated plants.

The irrigated ones are: Cauliflower, cabbage, beans, peas, tomatoes, lettuce, celery, eggplant, cotton, alfalfa and cane sugar. All these plants are raised absolutely on the same principles and in the same manner as in this country.

So far we have dealt with the extensive culture. But intensive culture is very lucrative. Orchards abound. During March and February, Joppa, the most representative farming city of Israel Land, is perfumed from one end to the other by the blossoming trees of oranges, tangerines, and lemons. One would certainly be led to believe with the Bible, that the Promised Land is the land where milk and honey flow.

Besides oranges trees we have also those of the almond, apple, peach, apricot, pear, quince, cherry, olive, fig, mulberry (for sericulture), and pomegranate. I am sorry to say that spraying is not so much practiced as in America;

but the trees are well pruned. Only the potatoes are sprayed with Bordeaux mixture, and these not extensively. Next to the orange tree the grape is receiving most attention, the products being mostly made into wine. It seems as if the country were blessed by Bacchus. In fact, Palestine wine was granted a great prize in the Paris exhibition of 1900.

Many of the farm products are exported to Europe, and some to this coun-

try. England is the most favored market for oranges.

Besides these occupations, the farmer raises the silk worm, and extracts an essence used as perfume from the *geranium rosa*.

The introduction by Jewish farmers of such crops as *Ricinus communis* and *Gossypium sativa* (the seeds came from the United States) are the best proofs that the farmers in Palestine are progressive.



Did you ever go a-fishin' in "the merry
month o' May,"

When the cornplantin's over an' you
had an idle day?

When the trees were all a-shinin' in
their glossy coats o' green,

An' the birds among the branches, like
a choir behind a screen,

Sang their songs o' love an' gladness in
their sweet an' cheery way?

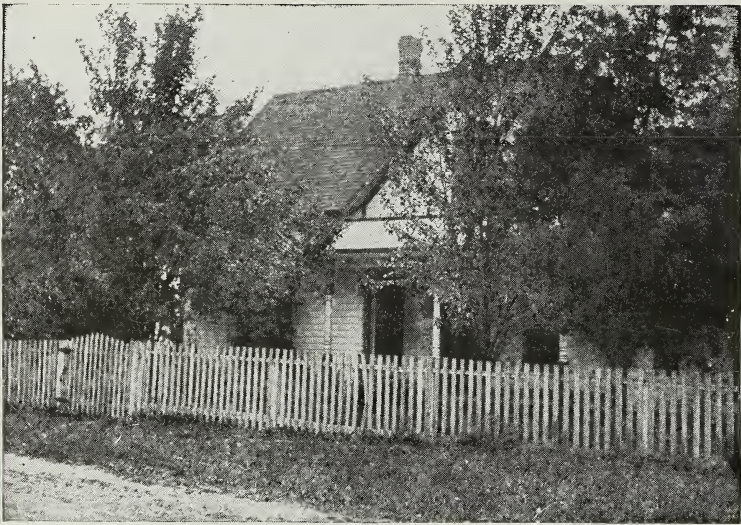
Did you ever go a-fishin' on such a glori-
ous day?
—M. Jay.

Landscape Gardening

By Prof. V. H. Davis

The term "Landscape Gardening" is often a very misleading one. By its very look and sound it seems to suggest princely and magnificent parks, villas, estates, and hunting grounds, and to overshoot entirely those smaller domestic concerns around which the most of our lives and interests center. The term in its true meaning does, nevertheless, bring itself to the consideration of

landscape scene. In as much as we all must come in daily contact with some form, or some expression of this art, whether we will or not, it would seem that all persons ought to endeavor to understand its methods and aims just as they endeavor to master the alphabet of literature. Good taste in gardening will yield its possessor as much pleasure as good taste in architecture, literature or



A HOME LOVER RESIDES HERE.

these more lowly problems; and it is for the sake of these smaller cares that we need most to study its principles.

Landscape gardening is eminently a fine art, just as much so as painting or architecture, and in some respects possibly surpassing them. To me it would seem a higher form of art to "create" a landscape picture than to copy this picture on the canvas. I say "copy" advisably, for no painter has been able to perfectly reproduce upon the canvas all the delicate shades of colors, lights and shadows to be seen in any harmonious

music. And just as one may develop good taste in architecture without any thought of becoming a professional architect, so one may properly educate the tastes for landscape gardening with no expectation of becoming a landscape gardener.

The gardening art offers this advantage to its lovers: that they can everywhere enjoy it, and that with small expense they can patronize it on their own account. The poor wash woman who scarcely has time to look at the statue of George Washington in the city park,

and scarce money enough to buy a chromo, is quite able to grow geraniums in her window and to have a pretty bed of phlox in her yard. The opportunities to cultivate a taste for this sort of landscape art lie all about us, while to only a few will come the freedom of art galleries and exhibitions. It does not matter, then, whether we have in mind a great park or a small city

times hear placed upon them does not cause us to forget the opportunities at our own doors. Perhaps the parks will stimulate home decoration, but I wonder what the result would be if every person who owned a home in Columbus would improve its surroundings even approaching the possibilities presented? Columbus would be famed the country over as a beautiful city and the parks



THE TOUCH OF AN ARTIST.

square, a large estate or a moderate door yard, we must go about our work with an artistic spirit if we want good results. Two trees and six shrubs, a scrap of lawn and a dozen flowering plants may form either a beautiful little picture or a huddled disarray of forms and colors. Parks and boulevards have their place in any well ordered city. I would not detract in the least from their importance and value, but I sometimes wonder if the emphasis we some-

and boulevards would follow as a matter of course.

Before anyone, skilled or unskilled, begins to decorate a place no matter how small, they must have some plan for the work, and the more fully matured that plan the better. These plans should be definitely committed to paper, for, no matter how definite our ideals today, they are liable to change, and since it requires a considerable season to compass any landscape plans, the

first keynote is likely to have been lost before the end is reached, and the later additions are likely to be out of harmony with the earlier work. If proper time is given to the subject, and the advice of those who have had some experience is sought, there need be little difficulty in the making a good working plan by the amateur. Both father and mother should be interested and plan together, and the children too, should have a voice in the matter, for few things holds them to the home as

The natural style is unquestionably the favorite in America. When a home is built or a park laid out, naturalness is lost to some extent, but by thoughtful work we may subtract greatly from the artificiality of the construction.

Open lawns are the natural foundation for natural landscape. They should be as large and as little interrupted as circumstances will allow. Generally it is a good practice to devote all of the interior and center of any landscape piece to lawn. The planting of trees



HOLLYHOCK.



FLOWERING ALMOND.

the trees they have helped to plant and care for. When cost is not too great an item, a complete plan made by a skilled gardener, who is willing to incorporate, as far as possible, the particular kinds of plants and other features desired by the owner, will give the most satisfaction.

There are two great styles of landscape gardening—the “natural” or the English and the “architectural” or Italian. The difference has been very nicely expressed by Downing, who says that “In the English landscape one sees and feels everywhere the spirit of nature, only softened and refined by art. In the French or Italian garden one sees and feels only the effect of art, slightly assisted by nature.”

and shrubs should in a general way be confined to the boundaries. Buildings should be located toward one side. For city lots the lawn should be kept clipped because smooth surfaces and straight lines are already in evidence, but for larger places the unclipped lawn is much the more natural. The lawn should cover a comparatively large area. One would not want the furniture in the parlor to take up three-fourths of the room; much less would one want the green carpet of the lawn nearly covered with such furniture as trees and flower beds.

As the lawn is such an important part of any landscape plan perhaps it would not be amiss to mention briefly some

of the fundamental things to be remembered in its making.

First of all the surface should slope away in all directions from the house, so that there will be no surface water standing upon it at any time during the year. Thorough drainage will be found essential in most cases. Many expedients are resorted to to get the proper grade, but the services of one skilled in the use of the engineer's level will usually prove to be by far the most satisfactory way. Terraces should be avoided whenever possible, especially

raked and rolled in order to get the surface as smooth as possible, and if much filling has been done, it should be allowed to settle for several weeks and the depressions, if any, filled in. All the trees and shrubs, if possible, should be planted before the grass seed is sown.

Various lawn grass seed mixtures are upon the market. The base of most of these mixtures suitable for this locality are common Kentucky blue grass and white clover. While the spring is the best time in which to seed a new lawn, it may be done at almost any time if



RURAL ART.

with comparatively level surroundings. They are unnatural and hard to keep in perfect condition. At the same time perfectly flat surfaces are to be avoided, as they are not natural and rarely ever found in nature.

A good lawn cannot be made except on a rich soil and if this is not the character of the land in hand the first thing to do is to make it rich and as deep as possible. Plenty of plant food must be added either in the form of compost or commercial fertilizers and their application should be continued from year to year.

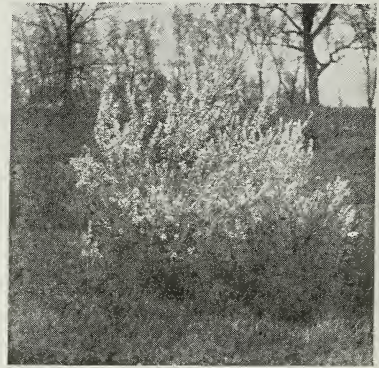
After grading, the land should be

plenty of moisture can be supplied. If seeding is done in the fall the young plantlets are likely to be killed by freezing. The amount of seed required will depend on the vitality of the seed. Usually when sown in April or May less seed will be needed than when sown later. It is always best to use an abundance of seed. Perhaps the quantity per acre that will give the best results under average conditions is about three bushels blue grass, or two bushels of blue grass and ten pounds of white clover. The amount for any sized lawn can easily be determined by finding out what fractional part of an acre it con-

tains. Divide the seed in two lots, sow the first lot in strips or lands and the second in the same way only in opposite direction. Then thoroughly rake the ground and the work is done. Great care must be exercised on a newly seeded lawn, that it is not cut up or disfigured by walking over it or allowing animals upon it.

Covering the lawn with a coarse manure in the fall, to lie more or less exposed to view all winter long, is very objectionable and unnecessary, as a fine compost is equally effective in producing good growth. It will be necessary

whole composition is apt to fall to pieces, since it lacks the necessary framework. Trees are able in some cases to make a landscape of themselves which can hardly be said of any other group of plants. Then, too, a tree is a beautiful thing by itself. Each good tree has its own peculiar and sufficient beauty. In all plantings of sufficient size there should be one or more specimen trees so placed as to show their individual good qualities, and so grown as to possess those good qualities in the greatest measure. For all these reasons the selection of suitable trees becomes



to frequently sow additional seed, which should be raked in with the compost and fertilizer. The quantity may vary from one to two bushels per acre, scattering it more freely where the soil is poorest, or where weeds are most likely to appear.

Some one has said that many large trees about a house are a sure indication of family distinction and worth. Say what we will, a splendid tree carries with it an air of nobility and stability that we cannot escape. In any save the smallest places trees form the framework of the plantings; they are the first to be considered and the first to be placed, and unless they are carefully selected and happily placed, the

one of the landscape gardener's first and most important duties. In the selection of varieties dependence cannot be placed upon the often exaggerated descriptions found in the average nursery man's catalogue. Especially is this true of new varieties, which should be avoided. Stick to those varieties known to do well in your locality. The size to which different kinds of trees will grow must be fully understood, although this will vary much with the condition of the soil in which they are planted. While young they occupy but little space, and the desire to have enough planted to give immediate effect often leads to too close planting.

Specimen trees should never be plant-

ed so closely that they will touch even when fully grown, but if grouped for shade close planting is permissible. While of small size, it may be desirable to plant closely for immediate effect, removing the least desirable specimens before they touch enough to injure the more valuable. The great danger of

many chances for delays, poor stock, and injuries from drying out. Evergreens may be transplanted with success at any time of the year from April to December. April, May, and June are the best months for transplanting this class of trees. More trees die from injuries received in digging than from



PRACTICING THE PREACHING.

this practice, however, is that we are liable to neglect the desired thinning until too late.

Generally speaking, the best time to plant trees is in the spring. This work should be done as early as possible, but not until the soil will work up fine and mellow. The plants should be ordered from the nursery in time for prompt and early shipment. If the orders are sent in during the rush of shipment there are

any other cause and the greatest care must be exercised in this work, if the losses are to be small. The larger the tree the greater the injury will necessarily be to the roots by removal. For this reason a young plant will often transplant better and make a better tree in a shorter time than one much larger and older.

No matter how carefully a tree may be dug up, nearly all of the feeding

roots are destroyed and the remaining ones can supply only a small amount of sap to replace that evaporated from the branches. By removing the branches and buds in proportion to the injury to the roots a balance is created and the plant is much more likely to live. Pruning, too, at the time of planting is nearly always necessary to start the branches at the desired height, and in the proper number. The ends of all broken roots should be cut back smoothly so that they may heal over readily.

No matter how well the soil may be prepared or how fresh the trees, if the work of planting is not well done they may fail to grow or grow so poorly that they will never be satisfactory. The nurseryman is often blamed when the trouble has been in the way the trees have been planted. The hole that is to receive the tree should be made considerably larger than the roots and deeper than is necessary. Place some rich, loose soil in the bottom of the hole, then set in the tree and cover the roots with good soil, a little at a time, working it in well around the roots with the hands if necessary. Press the soil very finely around the roots as the hole is filled up, leaving a few inches of loose earth on the surface. The tree should be planted about the same depth or a little deeper than they stood in the nursery row. If the soil is fairly moist and pressed down well around the roots watering will not be necessary at the time of transplanting. If the soil is dry, water should be added after the hole is partially filled, and then filled the remainder of the way with loose earth. By keeping the surface soil stirred, or by covering it around the base of the tree with straw, hay, or grass from the lawn, the evaporation of moisture will be largely prevented and the life of the tree saved in many cases.

Deciduous shrubs are beyond all question the most important element in planting small grounds. To some persons the masses and borders of loose growing shrubbery suggests nothing but neglected roadsides, but this feeling is due to an untrained sympathy, and a lack of true feeling for nature.

Nothing is so crude and vulgar from an artistic standpoint as an over-display of colors. The most refined enjoyment will arise from delicate coloring and almost inperceptable distinctions.

Shrubs are indispensable to any natural planting. They, too, should be placed around the border, with or without trees, depending on the size of the place. There are so many perfectly hardy shrubs suitable to almost every condition, that there is little excuse for the planting of those kinds that have to be carefully protected and coddled through the winter. The perfectly wild garden, able to care for itself and perfectly at home with its surroundings, has a certain permanence and unity of effect which no other garden can have. Shrubs should be given proper pruning, but they should be spared the sort they often get. Only in exceptional circumstances should the tops be sheared or the growth cut back at the extremities. This spoils at once the graceful drooping habit which is separately characteristic of almost every species. When the pruning knife is applied to the shrubs it should be applied to the base. Old, straggling stems are cut away and fresh, clean, vigorous shoots come up in their place. Many kinds, as the shumac and hydrangea, give best results when they are cut back nearly to the ground every year and allowed to sprout afresh. The rules observed in planting the trees will apply equally well to the shrubs.

The lawn, trees and shrubs must form the fundamental basis for all landscape

planting, whether large or small.

What shall we say about the insects and diseases that are becoming more and more troublesome every year? We are all but overwhelmed with their number and variety. The trees, shrubs, and vines planted with so much hope and promise, all too often end in the rubbish pile and the alley, and all on account of some insect or disease that creeps in and destroys "ere we are aware." On account of these enemies, it is not always possible to select just the trees and shrubs that we want, but must limit our lists to those that resist attack.

The proper spraying of plants to protect from insects and diseases is an unpleasant and difficult task. Unless done thoroughly it may as well not be done at all. Apparatus for making the sprays and applying it can be secured at a reasonable cost and if one is willing to

go to the trouble of informing themselves and to take the time and the trouble to make and properly apply the mixture good results may be secured by the amateur. In certain cities there are experts who have built up quite a business "care taking." These men agree for a stipulated yearly sum to properly prune, spray and care for the planting on private grounds, and the plan is proving highly satisfactory. While the expert does not guarantee the plants to live any more than your physician guarantees you to live, he does agree to give the very best care known at present, and usually the health and beauty of the plant is preserved. This plan is proving a great help to those whose grounds are not large enough to warrant a professional gardener the year around. For a reasonable expense they are enabled to enjoy their home and its surroundings to the fullest extent.

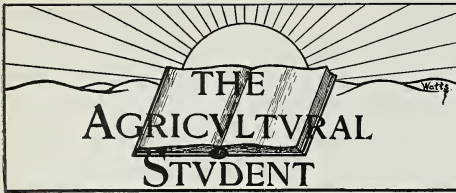
The Portrait of Professor Plumb

(Concluded from Page 7.)

Husbandry Literature," has taken high rank as an author on subject dealing with domestic animals.

A photograph can give but a faint idea of the portrait. It is a large three-quarter length picture, measuring four and a half feet in height and three feet eight inches in width. The work was executed by Mr. Albert C. Fauley (recognized as the leading portrait painter of Columbus), who has painted Gov-

ernors McKinley, Bushnell and Nash and many other men high in civil and political life. The style of the work is that known as the new or "impressionistic," done with a broad, bold stroke. It is generally agreed that the portrait is a most excellent likeness. This factor, coupled with the character of the man, make the painting a real addition to the famous collection at Chicago.



A Monthly Magazine Devoted to the Interests
of Farming, Stock-Raising, Dairying
and Creamery Work.

Published by the Agricultural Student
Pub. Co. in connection with the Agricultural
College of Ohio State University.

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SUBSCRIPTION PRICE

One year (9 issues)	\$0 50
Half year	30
Single copies	10

Advertising Rates on Application.

All literary matter should be addressed to
the Editor; and all business communications
to the Business Manager.

Entered at the postoffice at Columbus, Ohio,
as second class matter.

COLUMBUS, O., MAY 15, 1911.

Editorial

In placing before our readers the last regular issue of the school year, we wish to ask your continued support for the coming year. According to present plans, there are many good things in store for our columns during 1911-12. We trust some progress and improvement has been made during the past year and, with the increased interest and support, the next year should see a rise to a still higher plane. The new

staff respectively solicits your support and co-operation and every "boost" will be greatly appreciated. To help your paper is to help your college and yourself.

¶ ¶ ¶

We are very greatly indebted to the State School Commissioner of Ohio for several cuts in this issue.

¶ ¶ ¶

We are highly gratified in being able to promise our readers for next year occasional letters from Dean Price during his stay in Europe. Replete with the interest surrounding old world methods of agriculture, we feel that the Dean's letters will serve to materially grace our columns and edify our clientele.

¶ ¶ ¶

The end of the school year is upon us! The beckoning joys of the vacation season are nigh at hand. What now? The senior, sheepskin in hand, reluctantly bids adieu to admiring friend, and goes forth on his way, to put his shoulder to the wheel and do his part in making this world a better abiding place for man. Success to him! The others are anticipating great benefits from vacation days. Fortunate, indeed, are those who are permitted to enroll with the "horny handed sons of soil," to work in partnership with Nature, whose wonderful methods and lessons should now mean infinitely more to us, and stimulate still stronger desires to investigate them with still greater energy on the advent of the new school year.

¶ ¶ ¶

The latest reports indicate that the bill providing for the protection of quail for five years is slumbering in the hands of the Senate Committee and has no chance of being reported out. As to the desirability of protecting our quail, we quote Prof. H. M. Benedict, of the University of Cincinnati, who says:

“Scientific investigations have shown that each live quail is worth about \$15 to the farmers on account of the harmful and destructive insects and worms it consumes. That same quail is worth, at most, fifty cents for its delicate meat. I like quail as well as anybody else, but I don’t feel like helping to kill off these birds when their slaughter is a clear loss of something like \$14.50 each to the community.”

’Tis the indictment of the quail hunter, and a little concerted action on the part of the farmers in behalf of their interests (here as in many other matters relating to agriculture) would secure favorable legislation in this regard, and would be another step in the right direction towards making the open country more as its Maker intended it to be.

THE OFFICE.

The handsome furnishing of the office of this publication in Ohio Union is now assured. Nobly, indeed, have both the student body and faculty responded with material contributions towards this. Those few who thought it inadvisable to contribute are simply not abreast of the times and of the pervading spirit of progressiveness, leading among other things to a better and more representative magazine. The office is on the top floor of Ohio Union, the northwest corner, and is the east room of the group of publication offices. and

will furnish a very creditable home for “The Student.” Here everyone will find a hearty welcome awaiting him; any new idea for the betterment of the paper will be gratefully received and duly considered by the staff. This organ belongs to the students of the Ohio College of Agriculture, and it is the right and duty of each one to see that he has a personal voice in shaping its policy. Be a booster then, inspect the headquarters of your publication, and talk over plans for the next year!



OUR NEW HOME.



NEWS NOTES



THE AGRICULTURAL SOCIETY.

The members of the Agricultural Society were treated to a rare discourse at the last regular meeting of the society on Wednesday evening, May 3rd. Prof. A. B. Graham was the speaker, his theme was "The Call of the Farm." With great force the duty of the man to the land, and most of all to his home community, was emphasized. Prof. Graham outlined the procedure necessary for rural leadership, the gist of the entire matter being to "lead as if you lead not." Thus only can success be assured to the aspiring graduate. Those present went away with a determination to modestly strive to attain their proper sphere among their fellows, to live for good rather than gold and glory, to consider the betterment of American Country Life in all its phases—field, home, school, church, community—the leading question of the day.



The associate editors recently appointed to complete the staff of "The Agricultural Student" are: C. R. George, '12; B. A. Wililams, '13, and R. M. Jordan, '14. The assistant business manager will be chosen by a contest to run from May 10th to Sept. 30th, and for which the ardent support of the student body is solicited.



During the past two months representatives of the Extension Department have visited 125 farms, delivered 82 lectures at 59 Granges in 36 counties, and have held special meetings as follows: 13 Horticultural, 16 Domestic Science, 21 Crops, 17 Soil Fertility, 7 Live Stock, 7 Dairying, and one concerning School Gardens.

TOWNSHEND BANQUET.

Townshend Literary Society held its annual banquet in Townshend Hall, Friday evening, April 21. President Hedge called the meeting to order, after which the officers for the spring term were installed. After the installation, the new President, G. Gusler, took the chair. Mr. Gusler indulged in a very inspiring and instructive inaugural address. He pointed out the advantages to be derived from a good literary society. His address showed careful consideration of the question at hand and the society was well pleased with the policies advocated. Notwithstanding the countless counter attractions, Townshend is doing excellent work this spring.

After a short business session the society enjoyed a delicious banquet served by the Busy Bee caterers. President Gusler acted as toastmaster and showed rare genius in making this part of the program a success.

Prof. Erf, a former member, spoke of the founding and early history of the society, telling of the days when the society was wont to convene in the sanctum sanctorum of "Jack" Cunningham. Mr. Cadwallader, '10, gave a very interesting talk. The members of this year's graduating class, as well as one or two others lifted up their stentorian voices in oratory replete with good advice and farewell notes. Ready wit and timely jest flew "fast and furious," and it was near the "wee sma' hours" when Townshend finally adjourned, each one feeling doubly sure that to belong to a society which meant culture as well as social enjoyment was doubly worth while.

DEAN PRICE TO GO ABROAD.

Dean Price has been granted a leave of absence for next year and will spend the time in Europe. He expects to sail August 22 and will go direct to Halle, Germany, and remain there for the school year, taking work in rural economy at the University of Halle. Most of his time will be spent in study, but he will also travel through Germany, France, Northern Italy, Holland, Belgium and England. A study of agricultural conditions and especially of agricultural institutions will be made in these countries. The Dean returns late in the summer of 1912, in time to resume his work at the beginning of the year.



Mr. T. L. Wheeler, '05, has recently been appointed Agricultural Extension Editor, and will have charge of the bulletins and various other publications issuing from the Extension Department. After graduating from "State," Mr. Wheeler was for some time connected with the "Drover's Journal" of Chicago, but for several years has been on the editorial staff of "The Farmer's Guide," published at Huntington, Ind. The position which Mr. Wheeler now occupies is rather unique, inasmuch as no other Extension Department has as yet established a like position.



J. O. Williams, '08, of the College of Agriculture, and a special student in Animal Husbandry, now in charge of the U. S. Government stud at Fort Collins, Colo., according to press reports, has just purchased 20 Morgan horses of J. W. Clise, of Redmon, Wash., for shipment to the Island of Guam. Mr. Williams has a very responsible position, with the prospects of becoming one of the prominent men of America in horse breeding problems.

Prof. W. R. Lazenby will start on his extended tour of the world soon after the close of school. He has been granted a leave of absence for next year and will spend practically all of his time in travel and study. He first expects to visit the Michigan and Minnesota forestry camps and the Yale summer camp, after which he embarks for England, landing at Liverpool. Going north through England and Scotland, he will visit Norway, Sweden, Germany and Russia in succession. Then he leaves for South America, going through Mexico and Central America. From South America he will continue on to Australia, the Philippines, Japan, China and India, and back via Suez Canal and Southern Europe, Italy, France and Spain. His family will spend most of the time in Colorado and probably join him in Southern Europe. We hope to have some very interesting and entertaining letters from the pen of Prof. Lazenby in regard to foreign conditions as he finds them in his circumnavigating tour.



Quite a group of artistically inclined gathered in Townshend Hall quite recently to listen to Mr. Alfred Montgomery, "The Farmer Painter," of California. Between convulsions of mirth caused by the droll wit of "The Farmer Painter," the audience was tendered many golden gleams of wisdom and advice, poetry and politics. The subject of the discourse was "Art on the Farm," and everyone left, countenance wreathed with smiles, soul full of gladness, declaring it to be one of the most pleasant hours they had recently experienced. Some of the painter's work was on exhibition, and its extreme realism elicited a great deal of favorable comment.

CORN SPECIAL.

The last Agricultural train of the school year was run over the Pennsylvania line, April 25-27, from Van Wert to Waterford (Columbiana Co.), thus passing entirely across the state. The lectures and demonstration work were devoted chiefly to the subject of better corn growing. The Agronomy Department urged upon the farmers the necessity of testing all seed corn before planting this spring, and showed by samples collected from each neighborhood that the average germination this season is only about 70 per cent. and in some cases runs as low as 30 or 40 per cent.

The Fertility Department forcefully demonstrated the fact that drainage, good tillage, and liberal application of manure, phosphate and in most cases lime, are the chief factors which make for a large corn crop.

These principles were further emphasized by distributing among the farmers neat cards bearing the following verses composed by Professor Vivian:

Pointers for Corn Growers.

Do not fail to drain your soil;
It will pay you for your toil.

If clover's sickly, put on lime;
That will bring the soil to time.

Growing corn much water needs:
Keep a soil mulch; kill the weeds.

Heavy sods and good manure
Make the corn crop doubly sure.

This advice pray do not scorn;
Use some phosphate on your corn.

These verses have already been widely copied and have elicited much favorable comment as a means of impressing upon the farmers these fundamental principles of corn growing.

Another new feature which greatly increased the efficiency of the general

instruction was the work executed by Mr. Wheeler, the editor of the Extension Department. Mr. Wheeler accompanied the train and supplied synopses of the lectures to the local editors and aptly arranged for the securing of wider publicity for the event, thus carrying the instruction to a great many who were unable to attend the lectures.

The entire trip was marked by much interest and enthusiasm on the part of the communities visited.

¶ ¶ ¶

The Horticultural Society held its regular meeting April 27th. Mr. R. W. Jordan gave a very interesting and profitable talk on "Onion and Celery Culture in Ohio." Mr. Jordan comes from the noted onion and celery district of Northern Ohio and he thinks that we have as good an opportunity for developing these industries as any state. The quality of the Ohio celery is as fine as produced anywhere in the United States. This talk was followed by Professor Davis, who spoke upon "Horticulture in Ohio." Professor Davis discussed the present conditions of Horticulture in Ohio and its possible development.

Professor Paddock also had on exhibition his fine new collection of Herbarium specimens of economic plant diseases and insects, and much interest was taken in inspecting them.

At the May meeting of the society Professor Vivian will give his address on "The Art of Landscape Gardening." Professor Vivian has done a great deal of work along this line and the lecture will be illustrated with stereopticon views.

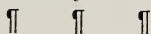
¶ ¶ ¶

Mr. B. J. Moore, of Mississippi, recently purchased two fine Berkshire gilts of the Department of Animal Husbandry.

Prof. F. R. Marshall has been called to the far West to do some work for the Tariff Commission in regard to the wool tariff problem. He will work among the large ranchmen of Utah, Wyoming, Idaho, and Montana, ascertaining as to the exact cost of wool production, profits, etc. He is expected to complete the work in July. Prof. Marshall will then proceed to the western coast, and tour Washington, Oregon, Vancouver, and probably return east by way of the Canadian Pacific, thus offering an excellent opportunity for studying some very vital Animal Husbandry problems in that section at first hand.



Mr. H. J. Bower, fellow in Agronomy, is commencing one of the most elaborate soil experiments yet attempted at any institution. It relates to problems of soil mixture and capillarity and requires infinite care and skill in design of apparatus, etc. The work will be watched with increasing interest by all those interested in fundamental problems of soil fertility.



On April 24th, the classes in Olericulture, under the direction of Professor Montgomery, started a farmer's garden, which is to be an experiment to show what a farmer may realize from a small garden properly managed on the farm. The garden is so planned that there will be a constant rotation of crops throughout the season and the exact amount of labor put upon this garden will be tabulated and the amount of proceeds sold. The garden is one-fourth of an acre in size.



This last month one of the students has been experimenting with the orchard heaters, which the department secured this year, in the pear orchard north of Townshend Hall. Excellent success has been the result.

THE TUBERCULOSIS PROBLEM.

The tuberculosis problem is becoming more serious to dairymen. Prof. Erf appeared before a legislative committee last week and appealed to them to recommend a law providing that when cows are slaughtered for tuberculosis, the state remunerate the farmer for his loss to the extent of at least 90 per cent. of the legitimate appraised value. Dairymen who have been improving their herds for years and who have good sires at the head of their herds should not be asked to give up the result of their years of service in the interest of public health, without fair remuneration. The state pays for all other health conditions, why should it not do the same for the dairyman in case his cows are tubercular and the public desires their slaughter?

Not until the state will take a legitimate stand and give dairymen a fair remuneration for animals killed can they ever expect to eradicate tuberculosis. Otherwise dairymen cannot stand the loss and, rather than sacrifice the work of past years, they will go out of the business. This will ultimately result in raising the price of dairy products. People are demanding good milk, but they are not paying enough to enable the individual dairyman to stand the loss in case some of his cows prove tubercular. So the best remedy seems to be for the state to remunerate the dairyman for his loss. This is only fair, as it is a measure in the interest of public health.



The Horticultural Department is receiving many calls for men to fill responsible positions. This shows the great need of men trained in Horticultural lines and goes to prove that this department must soon be one of the leading departments in the Agricultural College.

Mr. Vernon L. Wildermuth, '09, is the author of a bulletin entitled, "The Alfalfa Caterpillar," recently issued by the Bureau of Entomology, U. S. Dept. of Agriculture. Mr. Wildermuth, upon graduating, became field agent and expert for the Bureau, being located first at Purdue. Early in 1910 he was sent to Southern California and Arizona to investigate certain insects which were attacking the alfalfa in that region. He has been successful in finding a means of controlling this pest and expects to conduct further studies along this line in the same region during the coming season. He is at present located at Tempe, Arizona.

¶ ¶ ¶

Prof. George Livingston has been transferred from the Extension Department and is now instructor in the Crops Department during the absence of Mr. C. J. Grant. Mr. Grant has obtained a leave of absence in order to pursue certain studies at the Wooster Experiment Station and to become more familiar with general Ohio conditions by working with the Extension Department during the summer. He will return to the Crops Department on Sept. 1st.

¶ ¶ ¶

Mr. George A. Dix, of Delaware county, a member of the Judging Team in 1909, recently sold an excellent three-year-old Percheron mare to Mr. W. S. Corsa, White Hall, Ill., for a handsome sum. He is also expecting a Percheron foal, sired by the famous world champion, Carnot.

¶ ¶ ¶

Commencement exercises will be held in the Armory this year, instead of in the large tent as heretofore. This change has been decided upon because the unsettled condition of the weather at this season renders the use of a tent unsatisfactory.

ANOTHER RECORD SMASHED.

Pontiac Clothilda DeKol 2d, a Holstein-Friesian cow owned by the Stevens Bros. Co., Liverpool, N. Y., has broken all records for butterfat production for periods of seven and thirty days. This wonderful cow produced in seven consecutive days 646.1 lbs. milk containing 29.766 lbs. of fat, and in 30 days 2,588.4 lbs. milk containing 116,229 lbs. fat, the amount of fat for the week being $1\frac{1}{3}$ lbs. in excess of anything before known. The fat produced is equal to 34.73 lbs. of the best commercial butter for the week and 135.6 lbs. for the 30 days.

¶ ¶ ¶

Mr. W. K. Schoepf, owner of Sheffield Farm, Glendale, Ohio, who has very noted Jerseys and Berkshires, has loaned the Department of Animal Husbandry the yearly bull, Carmencita's Minister. This bull was shown in 1910 on the circuit, where he was a successful prize winner as a calf. The University appreciates the generosity of Mr. Schoepf in making this loan, which comes at an opportune time, following the death of Raleigh's Aldan, the University Jersey bull.

¶ ¶ ¶

The Lord & Burnham Co. have just presented to the Horticultural Department a very fine, new, model greenhouse with all the latest and modern equipments. The new model will be quite a valuable addition to the department.

Another addition to the department is a very handsome new case in which Professor Paddock will exhibit his large collection of herbarium specimens of plant diseases and insects.

¶ ¶ ¶

The seventeenth volume of the Yearbook of the Department of Agriculture, 1910, will soon be off the press. It is a very elaborate volume, well worth placing on the library shelf.

Geo. F. Story, '10, one of the popular Animal Husbandry assistants who has in the past year been devoting his time to Agricultural Extension work, has been called to the Massachusetts Agricultural College at an increased salary. Mr. Story has already left to assume his new duties, which will be in the Massachusetts Extension Work. He will also have charge of the winter course students.



The recent visits paid to the Extension Department by Prof. Chas. H. Tuck of Cornell University, Prof. J. H. Miller of University of Kansas, and Prof. W. D. Hurd of Massachusetts Agricultural College, are significant as indicating the high esteem in which our Extension Department is held by other colleges. These men have charge of the Extension work in their respective states and came here to study the system of organization and the lines of work as developed by Professor Graham and his corps of assistants. Ohio is one of the leaders, if not the leader, in this line of work and is being widely copied after by other states. Moreover, Ohio is quite willing to aid other states in getting a start along this line. For instance, on May 22nd, one of the men from this department, Mr. Evans, will be sent to Gaston, W. Va., to conduct an Extension School for one week, in order to test the efficiency of this kind of instruction in that section. West Virginia is asking for this with a view to establishing an Extension system similar to that of Ohio, in the near future.



The location of the Agronomy experimental plots is being changed from the north end of the grounds to the field back of the old dormitory. The grounds will be extensively improved and beautified.

A herd of dairy cows belonging to L. S. Condit, of Condit, O., were recently tested for tuberculosis. Out of 56 cows, 42 reacted and 7 are suspected. The majority of those slaughtered were so badly infected that their meat was unfit for use. These cows were apparently healthy. Mr. Condit has been in the business nineteen years and has built up a good herd. Some of these cows were producing from \$100 to \$150 worth of milk per year, and yet Mr. Condit receives only one-half appraised value, or about \$20 per cow, from the state for their loss. There is now a bill before the legislature to provide for the payment to the farmer of one-half of the value of the animals slaughtered, allowing no extra compensation for pure bred stock. This measure should provide for the payment to the farmer of a larger percentage of the actual value of each animal. Such a law would be a long step forward in the eradication of this disease.



On May 13th, Professor Montgomery will take the students in the classes in Olericulture to Cleveland to visit the large greenhouses in that territory. The trip will be a very instructive one, as this is one of the greatest gardening districts in the United States and some of the finest greenhouses in the world are to be found here.



Prof. Erf's class in Farm Dairying has been taking several trips to noted dairy establishment, such as those of The Schaaf Dairy Co., Derrer Bros., and Bert Smith, Delaware, O.



The Duroc gilt, recently selected from Mr. E. S. Kelley's dispensation sale, has presented the Animal Husbandry Department with seven pigs, sired by Mr. Johnson's \$1500 Instructor.

The class in Dairy Cattle, with Prof. Plumb, spent Thursday, May 4, at Burt Smith's farm, near Lewis Center, studying the cattle in his Jersey herd and inspecting his breeding operations. Mr. Smith has an unusually good collection of American bred Jerseys, furnishing exceptional material for class work.

¶ ¶ ¶

The second annual fair of the Franklin County Agricultural Society will be held at Columbus Driving Park, Aug. 8, 9, 10 and 11. As was the custom last year, agricultural students will be chosen as superintendents of the various departments. Students interested should see W. G. Richards, Secy., at 47 Deshler Block.

Through the courtesy of the "Market Growers' Journal," Professor Montgomery has received a large number of cuts which he is to have reproduced on slides to use in the work in vegetable gardening.

¶ ¶ ¶

Prof. George Livingston has recently declined a very flattering offer from the Crops Department of the West Virginia Agricultural College.

¶ ¶ ¶

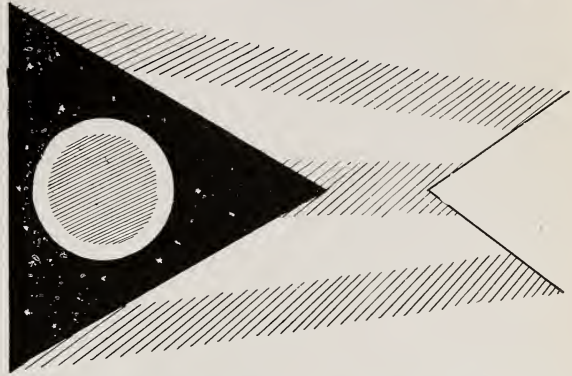
The Percheron Society of America has just issued a most instructive and artistic pamphlet, entitled "Facts About Percherons." It may be had by writing Wayne Dinsmore, Sec'y, Union Stock Yards, Chicago.



THE SPIRIT OF THE TIMES.



STATE NEWS



The official flag of Ohio, adopted May 9th, 1902. The stripes are red and white. Seventeen stars on a blue field, surrounding a white "O" with a red center.

Stark County.

The raising of tomatoes for the canning factory is in this county a new industry, or rather an old one rejuvenated, and bids fair to enrich those who care for such work. To the man who by careful figuring can see that during the coming summer he will have some extra time, there are offered by this crop, inducements that are not held by any other line of trucking.

Farmers in general do not spray their apples, but there are quite an enterprising "few" who are setting the example and one has invested in a gasoline engine which he uses for other purposes as well. Commercial lime sulphur wash seems to be in general favor and the eradication of the Scurfy Bark Louse which troubles this community is not only hoped for but expected.

A general interest in the testing of seed corn has resulted from the Farmers' Institutes.

Fulton County.

The San Jose scale is found in nearly every orchard in our neighborhood. More spraying has been done this spring than usual.

Williams County.

The Williams County Corn Association held an important meeting Friday evening, April 7. D. W. Galehouse, field assistant of the Ohio Agricultural Experiment Station, inspected the plots during the day. In the evening he met with a number of the members and gave an outline of the work expected. Mr. Galehouse spent Thursday, April 6, with the Montpelier Corn Improvement Association. This association was organized last year and the results for the year were very pleasing, and all considered that the time was well spent.

Another association, the Farmers' Township Corn Improvement Association, was organized a few days ago. It is in the edge of Defiance County.

San Jose scale is appearing in a good many orchards. Some are spraying, but as fruit raising for market is not carried on, a great many neglect it.

Quite a lot of new land is being broken up this year, also lots of tile put in.

Prospects good for bounteous wheat crop and light hay crop. All stock doing well.

Pickaway County.

Pickaway County is one of the largest producers of sweet corn in the state. Large sweet corn factories have been built in many parts of the county; each one is doing a great business every year. Many of our best farmers are raising some sweet corn each year, because it is profitable and is harvested at a time when farmers are not so busy, just about three weeks before the Indian corn will do to harvest.

Clark County.

Prospects for fruit are splendid. Few people are spraying. The scale is very prevalent and in a few years only those orchards will be left that have been cared for. One spraying demonstration was held in the county, near Selma.

Colonel Perry sold fifty-four head of A. J. C. C. Jerseys belonging to Mr. H. C. Bell, of near Yellow Springs, on April 18, for an average price of \$94.36. The offering included a number of calves. The bull Qualinda topped the sale at \$400, going to Kentucky. One yearling heifer brought \$180.

Mercer County.

The farmers of this county are getting interested in the old apple tree as never before, and are buying sprayers.

The clover crop this year will be short.

Paulding County.

The first County Experiment Farm in Ohio has just been bought, two miles south of Paulding. It consists of ninety-two acres of typical "Clyde Clay." Eight thousand acres of sugar beets are being drilled here this month.

Marion County.

There is more corn being tested here than ever before. The results show it to be in bad condition. Seed corn which tests high finds ready sale at \$1.25 to \$1.75. Fertilized corn ripened earlier and is now better for seed. A good deal of spraying is being done.

Butler County.

Have personally tested our seed corn, testing 93 per cent. perfect germination. Several farmers are awakening to the fact that last November was a hard month on seed corn, as germination tests show.

Fruit is in good condition. Cherries are expected in abundance.

To arouse interest in corn production, the Morgan Township Corn Improvement Association is offering prizes for the best acre of corn produced this year.

Several variety tests are to be conducted, using varieties found in home locality with two exceptions.

Mr. Cut Worm is waiting for the corn to come up.

Delaware County.

More interest is being taken in orchard work this spring than usual. Lime sulphur seems to be the spray for scale and is also rapidly taking the place of Bordeaux Mixture.

Ashtabula County.

Director Thorne, of the Experiment Station, addressed the Cherry Valley Grange recently.

The orchards in this section are receiving more attention than they have had for many years. Old orchards that have been badly neglected are being trimmed and preparations are being made for spraying. The San Jose scale has not reached the northern part of the county yet, but the canker worm and codling moth destroy a large part of the crop of unsprayed trees.

A spraying demonstration was given in Andover recently by orchardists from the Experiment Station.

Muskingum County.

A carload of horses was shipped from Muskingum County. The nineteen head sold for a total of \$3,300.00. Wheat is looking better than usual. A number of meadows are badly winter killed.

Correspondents whose news has been printed in the last two issues:

E. S. Gilliland—Brown.
L. J. Lane—Clinton.
Gilbert Gusler—Paulding.
A. W. Mayferth—Holmes.
A. G. Abbott—Medina.
G. C. Portz—Tuscarawas.
H. C. Woodruff—Huron.
Horton Fries—Ottawa.
R. B. Pritchard—Columbiana.
C. J. Fawcett—Morgan.

H. B. Bates—Stark.
B. F. Salisbury—Cuyahoga.
Dean Clippinger—Van Wert.
Henry J. Brown—Erie.
A. E. Shanklin—Mercer.
F. W. Cleveland—Delaware.
F. L. White—Muskingum.
Andrew Weber—Fulton.
H. S. Reber—Pickaway.
E. H. Mickle—Clark.
Walter Holson—Ashtabula.
P. C. Lawrence—Marion.
L. M. Oyler—Butler.



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By use of our Spray Products, owners of small orchards can spray as successfully as commercial orchardists. For further particulars write

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GLENBROOK SULTAN

the great breeding bull, have been outranked but once in the past season's show.

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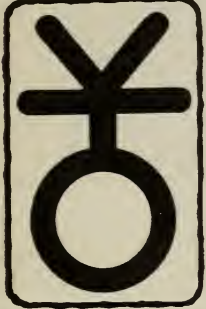
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is the foundation I build on and every sale I make must strengthen that reputation. If it doesn't, it is a poor sale for both of us. MY CLOTHES help build what I am. See my offerings at \$20 to \$30.

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Dr. De Laval invented the first successful continuous cream separator because he had worked harder, was better informed, and knew more about the centrifugal separation of cream from milk than any other man who had attempted it.

Starting with this advantage the De Laval Company has maintained its lead in the improvement and development of the separator, step by step from year to year, because it has always had an organization better equipped in every way to build the best separator than any one or all of its would-be competitors combined.

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The De Laval organization extends the world over, with a number of the finest and largest shops in the world in America, Sweden, Germany, France, Austria, Russia and other countries. Everyone of these shops is devoted solely to the building of separators. Their manufacture is not simply incidental to that of something else, as is the case on the part of every would-be competitor. No other separator shops compare with them in size, equipment or volume of production. They produce more separators in a day than any competitor in a week or most of them in a month.

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